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A systematic review of the factors associated with delays in medical and
psychological help-seeking among men.

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Abstract

Despite a growing literature on the factors associated with men's low rates of medical and psychological help-seeking, a systematic review of these is missing. Such an overview can help to inform health psychologists of the barriers to the performance of adaptive health behaviours, such as prompt help-seeking, and could inform theoretical advancements and the development of targeted interventions to facilitate prompt help-seeking among men. We systematically reviewed quantitative and qualitative empirical papers on factors associated with delays in men's medical and psychological help-seeking. The PRISMA guidelines were followed, and we used the databases PsycINFO, Medline, Embase, and PsychArticles (with keywords: men/male*/gender*, help*/seek*, and health*/service*/utili*[sation]) for papers in English. 41 citations (amounting to 21,787 participants aged 15-80+) met the inclusion criteria. Approximately half of these used qualitative methodologies (i.e., semi-structured interviews and focus groups), while half used quantitative methodologies (i.e., questionnaires). We identify a number of recurring cognitive, emotional, health-service related, and socio-demographic help-seeking factors/predictors from the 41 papers. Of these, the most prominent barriers to help-seeking were disinclination to express emotions/concerns about health, embarrassment, anxiety and fear, and poor communication with health-care professionals.

Keywords: Help-seeking, men, barriers, systematic review, service utilisation, delay.

Men's relatively low rates of seeking medical help is a phenomenon that has been supported by numerous studies (Cusack, Deane, Wilson, & Ciarrochi, 2006; Hale, Grogan, & Willott, 2010; Levant, Wimer, & Williams, 2011; McCusker & Galupo, 2011; Moller-Leimkuhler, 2002; Wenger, 2011). Serious health problems can arise when men fail to seek help when they experience symptoms, resulting in both poorer health outcomes for men, and an extra burden on the healthcare system (White et al., 2011). A late diagnosis, especially concerning fatal illnesses (e.g., cancer) can often be attributed to delays in seeking medical advice even after noticeable symptoms are detected by the patient (Gascoigne & Whitear, 1999; George & Fleming, 2004). It has recently been suggested that there is a link between men's low help-seeking and their higher mortality rates, compared to women (e.g., Hale et al., 2010). Although there is some overlap between the factors associated with help-seeking for men and women (e.g., socio-economic status, access to medical services, and marital status, Doherty & Kartalova-O'Doherty, 2010), studies have also indicated clear gender differences with regards to help-seeking tendencies. This is particularly the case for emotional problems and depression (Moller-Leimkuhler, 2002) where men's reluctance to seek help is more pronounced (Good, Dell, & Mintz, 1989). Furthermore, compared to women, men generally report higher levels of embarrassment during or in relation to medical appointments, and they also tend to endure symptoms for longer before seeking medical help - especially if no restrictive physical symptoms are involved (Doherty & Kartalova-O'Doherty, 2010). While there is some evidence that men may not always be less willing than women to report symptoms when probed (Macintyre, Ford, & Hunt, 1999), the vast majority of studies have found profound gender differences in help-seeking behaviour (Doherty & Kartalova-O'Doherty, 2010; White et al., 2011).

In recent years, health psychologists have developed theories and models on help-seeking and pathways to treatment (Kamperman, Komproe, & de Jong, 2007; Scott, Walter, Webster, Sutton, & Emery, 2012), in order to facilitate early illness detection. However, the recognition that addressing men's health needs requires a deeper understanding of male-specific psychology was expressed by health psychologists more than a decade ago (Lee & Owens, 2002). Furthermore, more recently, a special issue in the journal *Health Psychology* was devoted to men's health, where the aim was to identify and address issues related to improving men's mental and physical health through theory and practice (Gough, 2013). Interventions to encourage men to seek professional help have also been developed, targeting specific attitudinal barriers in men using health psychology models such as The Theory of Planned Behavior (Demyan & Anderson, 2012). For example, Demyan & Anderson (2012) used brief video presentations to influence male participants to adopt more favourable attitudes and beliefs about help-seeking. While their intervention was successful in changing help-seeking attitudes in the positive direction, other barriers, such as treatment fears, help-seeking stigma, disclosure distress, were not successfully addressed. There is therefore a need to identify the exact nature and prevalence of barriers and factors that are associated with men's help-seeking, so that interventions can be more focused and effective.

While empirical studies on male help-seeking barriers have identified several factors that are associated with reduced medical help-seeking, a systematic review and synthesis of these are missing in the literature. The only existing review paper (Galdas, Cheater, & Marshall, 2005), which is non-systematic, was published eight years ago, and since then several new studies on the topic have been published (see Table 1). The authors concluded that based on previous studies, male socialisation

seems to play an important role in shaping attitudes and beliefs that are detrimental to help-seeking in men (e.g., masculinity-related views of resilience and strength, and sometimes even beliefs of immunity to illness). Galdas et al. (2005) also emphasised that because the help-seeking barriers for men and women are different, at least when it comes to beliefs and attitudes about help-seeking, the multitude of studies that investigate gender differences are less useful in unravelling the causes and mechanisms of the barriers – an argument also presented previously by Addis and Mahalik (2003). Therefore, Galdas et al. (2005) argued that more research, especially qualitative in methodology, is needed to shed light on specific factors for men. Since Galdas et al.'s (2005) review paper, numerous new studies on men's help-seeking barriers have emerged. However, the current body of knowledge, albeit increasingly extensive, is too fragmented to be useful for a clear overview of the factors associated with low help-seeking rates in men. A systematic review is needed to provide a fresh update on recent developments in the field, and a more comprehensive and integrated understanding of the factors that prevent men from utilising health services optimally.

The aim of this paper was to systematically review - using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which is a standard practice in the social and medical sciences (McLeroy, Northridge, Balcazar, Greenberg, & Landers, 2012) - qualitative and quantitative empirical studies on medical help-seeking factors/barriers in men. Medical help-seeking has been defined as a multi-level process that can range from informal advice-seeking from friends/family/the internet to contacting health professionals directly (Cornally & McCarthy, 2011). This paper focuses on research that has investigated professional medical help-seeking, and the findings will be used to derive categories of help-seeking factors. We define a 'barrier' as a variable that directly inhibits men's help-

seeking (e.g., embarrassment related to seeing one's General Practitioner – or GP) and a 'factor' as encompassing both barriers and other indirect factors that are associated with, but which may not directly cause, low rates of help-seeking (e.g., young age).

Method

Inclusion criteria

(1) Empirical papers that identified at least one medical help-seeking barrier (e.g., psychological) or factor (e.g., demographic) in men; (2) papers using qualitative or quantitative methodologies; (3) papers on mental health or on physical health.

Exclusion criteria

(1) Theoretical papers on help-seeking; (2) scale developments on general help-seeking; (3) papers that did not analyse data from men separately; (4) papers that investigated help-seeking *habits* without directly addressing *factors* or *barriers* that reduce help-seeking; (5) papers that examined help-seeking barriers in special groups of men (e.g., prisoners, drug users, and homeless individuals) who were institutionalised or in a social situation that for more obvious reasons (e.g., addiction) prevented them from medical seeking help.

Search strategy

The databases PsycINFO (from 1950), Medline (from 1946), Embase (from 1980), and PsychArticles (from 1950) were used up to August 2012 (first week). First, all papers with the words 'men' or 'male*' or 'gender*' in the paper title were identified. Next, papers with 'help*' and 'seek*' in the paper abstract were identified and these were combined with the 'OR' function with 'health*' and 'service*' and 'utili*' (for 'utilisation' and 'utilise'). Finally, the first and second steps were combined with the 'AND' function. Searches were limited to the English language, and human participants, and duplicates were removed. Finally, we conducted organic

backward (by manually searching the references of the included papers) and forward (by searching the databases for any relevant papers that cited the included papers) searches to identify additional relevant papers.

Quality ratings

Each paper was rated for quality using the Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields (The Alberta Heritage Foundation for Medical Research, February 2004). For quantitative studies, there are 14 criteria (e.g., related to study rationale, study design, sample size, and detail and presentation of results), and for qualitative there are 10 (e.g., related to how the topic was connected to existing theory, the extent of detail of data analysis, and use of verification procedures to establish credibility of data analysis), where the maximum possible average score is two. Quality ratings were conducted independently by two raters, and minor differences were settled before deciding on the final scores.

Results

The number of papers that met the selection criteria was 41 (see Figure 1 for an overview of the search process). A range of methodologies were used in the papers (see Table 1); 22 were quantitative (questionnaire-based), and 19 were qualitative (focus groups and semi-structured interviews). The total number of participants in the studies was 21,787, with the largest study having a sample size of 5,990, and the smallest that of six. The age range of participants was between 15 and 80+, and the studies were carried out in various countries (e.g., Japan, Ghana, U.S.A., U.K., Australia, and Malaysia) with a range of ethnicities, although participants in the overall sample were predominantly White males.

In all the studies, help-seeking was operationalised as seeking treatment or advice from a health-care professional. Most studies measured current attitudes toward help-seeking to identify barriers, but a few papers also measured past help-seeking behaviour obtained through the examination of medical records. Fifteen of the studies investigated help-seeking factors related to psychological services, sixteen studies looked at general medical help-seeking (for both physical and psychological problems), and ten studies examined help-seeking related to specific diseases (e.g., sexual health, prostate disease, cancer etc.). We categorised the emergent factors as either *psychological* (e.g., cognitive and emotional) or *contextual* (e.g., health-service related and sociodemographic) factors in order to further untangle their prevalent nature. As Table 1 indicates, most of the factors that were identified in the papers were of a psychological nature. Below, we discuss both the psychological and the contextual factors in turn. Table 2 displays a synthesised summary of the factors identified in the papers, where closely related or identical factors (e.g., ‘reluctance to emotional expression’ and ‘emotional control’) are conflated for accessible presentation.

Insert Figure 1 and Table 1 about here.

The quality ratings of the included papers ranged from 1.2-1.9 (where below 1.4 was classified as low quality, 1.5-1.7 as medium, and 1.8 and above as high). Of the 41 studies, 11 had a quality rating score below 1.5 and were therefore of a weaker methodology/presentation, but the remaining 30 studies were of a medium to high quality. Hence, the overall quality of the empirical work in this area is of a good research standard.

Insert Table 2 about here.

Psychological factors

Restricted emotional expression (also referred to as ‘*emotional control*’, ‘*guarded vulnerability*’, and ‘*negative attitudes toward emotional expression*’), which is the view that men should not express negative emotions, was identified as a barrier in ten of the papers (Blazina & Watkins, 1996; Chan & Hayashi, 2010; Good et al., 1989; Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk, 2012; Lane & Addis, 2005; Mansfield, Addis, & Courtenay, 2005; O'Brien, Hunt, & Hart, 2005; Pederson & Vogel, 2007; Rochlen et al., 2010; Steinfeldt & Steinfeldt, 2010). For example, Johnson et al. (2012) found that men expressed a reluctance to seek professional help with their depression, despite their high distress, because they did not want to talk about their emotions. O'Brien, Hunt, and Hart (2005) also reported this tendency of non-disclosure of emotion with participants commenting that men are not ‘supposed to’ talk about their emotions, and that they should be able to cope with problems on their own.

The *need for independence and control*, too, was emphasised by these participants, as it was in other studies (Coles et al., 2010; Johnson et al., 2012; Mansfield et al., 2005; Smith, Braunack-Mayer, Wittert, & Warin, 2007). Hence, the themes of *emotional control* and *independence*, which mostly occurred together in the papers, were prevalent in the literature. Also, these traits fit well within the themes of *masculinity* covered in some of the other papers reviewed (Smith, Tran, & Thompson, 2008; Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011) because men often see these traits of being in control and independent as central to their masculine self-concept (Noone & Stephens, 2008). *Gender role conflict* – which is the distress caused by the clash between the gender roles that one is trying to follow, and one’s need to behave contrary to those norms, was also identified as a barrier in five of the

papers (Blazina & Watkins, 1996; Lane & Addis, 2005; Pederson & Vogel, 2007; Steinfeldt & Steinfeldt, 2010; Steinfeldt, Steinfeldt, England, & Speight, 2009); men who suffered from gender role conflict were less likely to seek help for mental health problems.

Embarrassment related to seeking help appeared in eight of the papers (Ansong, Lewis, Jenkins, & Bell, 1998; Coles et al., 2010; Doherty & Kartalova-O'Doherty, 2010; Gascoigne, Mason, & Roberts, 1999; Jeffries & Grogan, 2012; Lindberg, Lewis-Spruill, & Crownover, 2006; Pearson & Makadzange, 2008; Rahman, Al-Sadat, & Low, 2011). For example, embarrassment was found to be the strongest predictor of male non-help-seeking for mental health in the study by Doherty & Kartalova-O'Doherty (2010). Exploring the role of embarrassment in help-seeking further, Coles et al. (2010) found that this barrier functioned at multiple stages of the help-seeking process: (a) men felt embarrassed and out of place already at the clinic reception due to the lack of familiarity with the system, (b) they also reported being embarrassed to mention personal issues to the GP, and (c) they were not comfortable getting undressed in front of the GP.

Anxiety, fear, and distress about using health services were mentioned in five of the papers (Ansong et al., 1998; Coles et al., 2010; Davies et al., 2000; Pearson & Makadzange, 2008; Witty, White, Bagnall, & South, 2011). Men felt a sense of anxiety and weakness when they found themselves in the perceived vulnerable situation of asking for help about their health. The fear about finding out that they were seriously ill also played a role (Coles et al., 2010; Gascoigne et al., 1999; Hale, Grogan, & Willott, 2007), sometimes to the extent that they would rather suffer symptoms than risk being told that they were seriously ill. As such, the perceived loss of control that was experienced during the process of medical help-seeking deterred

men from taking the initiative, unless their symptoms were unbearable. Furthermore, in some cases they would rather wait until the problem required emergency services than to appear hypochondriacal by seeing their GP for something that turned out to be insignificant (Gascoigne et al., 1999).

Viewing symptoms as minor and insignificant was highlighted in three of the papers. Smith et al. (Smith, Braunack-Mayer, Wittert, & Warin, 2008a, 2008b) reported that men generally had a low perceived illness severity for their symptoms. Men believed that they could either control the symptoms themselves or just wait for them to go away. Mansfield, Addis, and Courtenay (2005) also gave importance to this barrier of symptom minimising, and found in their barrier scale that this was a valid six-item factor (with items such as ‘the problem wouldn’t be a big deal; it would go away in time’ and ‘I would prefer to wait until I’m sure the health problem is a serious one’). O’Brien, Hunt, and Hart (2005) investigated this barrier in more detail in their focus groups in which men spoke about their attitudes about avoiding seeking help for something that turns out to be ‘nothing’. Common reasons for these attitudes were that they might be wasting the GP’s time or making a ‘fuss’ for something insignificant. A related finding was that of *men not seeing themselves as susceptible to health concerns*, which was the fourth most frequent barrier in Davies et al.’s (2000) focus group study. The reason for this might be that men prefer to be certain that there is a problem before initiating help-seeking. Also, the finding that men report less interest in their bodies (George & Fleming, 2004) could be part of the reason why men often do not react to symptoms.

Smith, Tran and Thompson (2008), using *The Theory of Planned Behavior* (Ajzen, 1991), found that men’s *negative attitudes towards psychological help-seeking* mediated the relationship between traditional masculinity ideology and

psychological help-seeking intentions; the more men subscribed to masculinity norms the more negative their attitudes toward help-seeking , and the less likely they were to have strong intentions to seek help. Hence, Smith, Tran, and Thompson provide empirical support for both the negative attitudes toward help-seeking barrier (Briscoe, 1987) and the adherence to masculinity norms barrier to help-seeking. Further support was given to these findings by Vogel et al. (2011) and Steinfeldt et al. (2009) whose studies found links between conformity to masculine gender roles, self-stigma (i.e., the tendency to internalise negative public stigmas related to help-seeking), and attitudes toward counselling.

Lack of knowledge about symptoms, treatment, and services was another recurring barrier that prevented men from seeking medical help, appearing in four papers (Ansong et al., 1998; Davies et al., 2000; Moser, McKinley, Dracup, & Chung, 2005; Timlin-Scalera, Ponterotto, Blumberg, & Jackson, 2003). The pattern that emerged from these studies was that men were unaware of what constituted significant symptoms, so unless the symptoms caused them substantial pain or immobility, they preferred to wait and see (a tendency also identified in O'Loughlin et al., 2011). Moreover, even if they had concerns about their symptoms, they were not sure which service would be the most suitable for those particular symptoms.

Contextual factors

Poor communication with health professionals was reported in six of the papers (Cusack et al., 2006; Davies et al., 2000; George & Fleming, 2004; Lindberg et al., 2006; Rochlen et al., 2010; Smith, Braunack-Mayer, et al., 2008b). The concerns expressed by the study participants were related to a number of aspects of the patient and health professional interaction: lack of clarity of information presentation, being unable to develop a rapport with the health professional, and lack of politeness and

positive attitude of the health professional. For example, in their study of men with prostate cancer, George & Fleming (2004) identified the concerns that men sometimes have related to doctors rushing patients; while men tend to prefer shorter consultations than women, they still need to feel that some practical solution was accomplished in the time spent with their GP. Thus, negative experiences that they have regarding insufficient consultation time appeared to influence their perceptions of the usefulness of seeking medical help. Lack of credibility and trust were also identified as important factors (Davies et al., 2000; Mansfield et al., 2005; Ojeda & Bergstresser, 2008).

Davies et al. (2000) found in their focus group study that these concerns were in the top five barriers mentioned by men. One concern was about the technical expertise of healthcare providers. Men were unsure if their symptoms would be diagnosable because they had not heard of the symptoms before, so they would choose not to seek help. This was also in part due to their lack of knowledge about the nature of their symptoms and the roles of the GP and medical specialists. Another concern was that men were not very confident in the healthcare providers' abilities to address the problems of people with different ethnic backgrounds and homosexual men.

Lack of time to monitor one's health and to arrange for medical appointments was a factor that appeared in three of the empirical papers. Doherty & Kartalova-O'Doherty (2010) found in their study that full-time employment predicted low help-seeking, Davies et. al (2000) found that lack of time (and restricted opening hours of GP surgeries) was the third most frequently reported barrier by men in their focus group studies, and Smith et al. (2008) also identified limited time as a recurring concern of men in their semi-structured interviews.

The cost of medical services appeared as a barrier in six papers (Ansong et al., 1998; Buor, 2004; Davies et al., 2000; Doherty & Kartalova-O'Doherty, 2010;

Dupere, O'Neill, & De Koninck, 2012; Kalmuss & Austrian, 2010). In Davies et al.'s (2000) paper cost of service was the sixth most frequently mentioned barrier by men, as well as in the study of Doherty & Kartalova-O'Doherty (2010) who found that free medical services facilitated help-seeking in men. In some cases, however, men were under the false impression that certain services would cost them where they in fact were free.

Other health service-related barriers emerged in the focus group study of Coles et al. (2010); the authors found that, contrary to stereotypes, the men were keen to engage with regular health care services, but unlike the regular check-up opportunities available to women, men did not know of any such routine check-ups for them. In contrast Johnson et al. (2012) reported that men were less interested in routine check-up, and more inclined to only seek help for acute/specialised symptoms. However, the discrepancy between these two studies may simply be due to the age differences of the participants; Coles et al. (2010) used a sample of middle-aged and older men, whereas Johnson et al. (2012) used a sample of 24-50 year-olds. Younger men, who are generally healthier and busier, might be expected to be less interested in attending regular check-ups than older men, many of whom are retired and typically experience more medical problems. As a result, this barrier of few regular services could be more relevant for older men. Another barrier identified by Coles et al. (2010) was that men did not think that enough information about health services was available to them, and so they wanted to receive more such information. They felt that they sometimes had to make an extra effort to obtain such information. What they thought would be helpful in this regard was for the service providers to send flyers and leaflets in the post, as well as having such information in the local newspapers.

Finally, socio-demographic factors such as low *educational status*, *young age*, and *never-married status* were all identified as factors associated with medical help-seeking in that a negative correlation was found between these and help-seeking frequency (Buor, 2004; Doherty & Kartalova-O'Doherty, 2010; Holden et al., 2006; Koopmans & Lamers, 2007; Mackenzie, Gekoski, & Knox, 2006). Low educational status might be associated with low rates of help-seeking because educated individuals are more informed and knowledgeable about illnesses and the healthcare system (Mackenzie, Gekoski, & Knox, 2006). The reason why younger men seek less help may partly be an artefact of their lower levels of illness, and partly due to the fact that their vitality and masculinity is more important to them (Mackenzie, Gekoski, & Knox, 2006). As for the lower rates of help-seeking among single men, this may be due to the fact that partners, especially female, often support and encourage men to see a medical specialist (Doherty & Kartalova-O'Doherty, 2010).

Discussion

A number of help-seeking factors (presented in Table 2) were identified in the reviewed papers. Four of these are worthy of special attention because they appeared in multiple papers, and were empirically supported by more than one methodology and sample of participants: (1) embarrassment/anxiety/distress/fear related to using health-care services; (2) need for emotional control/guarded vulnerability; (3) viewing symptoms as minor and insignificant, and (4) poor communication/rapport with health professionals.

Embarrassment, anxiety, distress and fear often co-occurred in the papers, and appeared to stem from both a lack of familiarity with the services and the 'medical culture', as well as from the endorsement of masculinity attitudes, which make men feel weak and vulnerable in help-seeking situations. The participants in Coles et al.'s

(2010) study suggested that this barrier of low familiarity with services could be broken down by providing regular service information leaflets in the post. Receiving such information could make the services and their use familiar to men, and as such might also act as a reminder and motivator for using health services. Regarding the negative emotions that sometimes result from the clash between masculinity attitudes and the need for emotional expression and help-seeking behaviours (also referred to as gender role conflict, e.g., Pederson & Vogel, 2007), the literature suggests that there is a need for men to adopt more adaptive norms of masculinity which are conducive, not inhibitory, to help-seeking. The strong empirical evidence for the relationship between subscribing to traditional masculinity norms and sub-optimal help-seeking supports this need.

The need for emotional control, which was also a recurring barrier in the literature, is a personality trait that is often associated with traditional masculinity norms (Lane & Addis, 2005). The fact that men sometimes feel compelled not to express negative emotions even when probed by other people can be non-adaptive for their sense of well-being (Blazina & Watkins, 1996). Particularly, the reviewed papers on psychological (as opposed to the ones on physical health) help-seeking identified this barrier. The reason for this seems to be that men may not feel comfortable divulging personal emotional information because it puts them in what they perceive as a vulnerable position. Hence, they prefer to tolerate emotional distress for as long as possible, rather than sharing this information with health professionals, or even with friends and family (Good et al., 1989).

The barrier of viewing symptoms as minor and insignificant is one that seems to be, at least in part, the result of lack of knowledge about symptoms. This, in turn, may be due to a low interest in one's body and health (George & Fleming, 2004). This

barrier seems to be a combination of this lack of interest in one's body and health, the 'wait-and-see' attitude (O'Loughlin et al., 2011), and the propensity to tolerate pain for as long as possible because of the potential embarrassment of appearing hypochondriacal (Gascoigne et al., 1999). Indeed, public health experts are realising that it is not a good strategy to wait for men to actively seek out information because of their low propensity to do this (White et al., 2011). Instead, they propose that new strategies are needed to increase knowledge and awareness, for example by providing information in the work place, pubs, sports clubs, and youth centres. Such accessibility is expected to increase the knowledge of symptoms necessary to identify serious symptoms.

Finally, poor communication and rapport-building with health professionals was a recurring barrier that consisted of different but related issues of establishing a necessary connection with health professionals. Interpersonal issues and the perceived behaviour of health professionals, such as lack of politeness, tendency to rush without explaining important information, propensity to use incomprehensible jargon, and lack of sensitivity to the needs of the patient were mentioned. In addition, issues related to perceived lack of competence and credibility also emerged. Collectively, these barriers appeared to reduce the appeal of help-seeking in the men.

Our findings support the theoretical view that adherence to traditional masculinity norms reduces men's willingness to seek help (Addis & Mahalik, 2003; Cusack et al., 2006; Noone & Stephens, 2008; O'Brien et al., 2005; Steinfeldt et al., 2009). For example, the embarrassment expressed by men centres around the loss of their masculinity, which they feel is compromised when seeking help. Similarly, the need for emotional control is related to a traditional masculinity orientation where expressing emotions is seen as being inappropriately vulnerable and weak. The barrier

of viewing symptoms as minor, too, may tie in with masculinity in that men may downplay their symptoms, and endure pain, in an attempt to feel strong and resilient. The need for control was found to be a barrier for help-seeking in one of the reviewed papers (Mansfield et al., 2005), so it may be that some men feel that by worrying about their pain they are losing control. Thus, these main barriers that were found in this review seem to result from attitudinal and belief-related factors concerning masculinity. Therefore it may be beneficial to target these non-adaptive masculinity attitudes using interventions based on health psychology models, such as Theory of Planned Behavior (Ajzen, 1991), as has been carried out in a recent study (Demyan & Anderson, 2012). Furthermore, there is a need for help-seeking theories to encompass both psychological factors (e.g., attitudes) and contextual factors (e.g., sociodemographic).

A limitation of the existing research on men's help-seeking barriers is that most of it has been carried out in North America, U.K., and Australia; 31 of the 41 studies were conducted in these locations. Some of the studies, however, did include participants of different ethnicities (in particular African American and Latin American), but the vast majority of the participants were Caucasian. Hence, the barriers and factors identified in these studies may not be generally representative. There is, therefore, a need for more research to be carried out in other countries to test the universality of the identified barriers and factors. A methodological limitation of existing research is that it is exclusively based on self-report data which may be biased due to the limited awareness that people sometimes have regarding their true motivations for not seeking help. The finding that people are often unaware of key behavioural motivations and triggers has been demonstrated previously in experimental studies (Bargh & Chartrand, 1999; Brody, 1980). The field, therefore,

could benefit from behavioural research that does not solely rely on participants' accounts of the help-seeking barriers. Behavioural measures (e.g., observational and experimental methodologies) could provide further support for widely used health psychology models such as the Theory of Planned Behavior (Ajzen, 1991); its application to male help-seeking barriers has already shown that attitudes toward help-seeking, as well as masculinity beliefs, are related to help-seeking intentions (Smith, Tran, and Thompson, 2008). However, behavioural measures are needed to demonstrate that attitudes and intentions indeed predict behaviour reasonably well in the context of help-seeking.

Limitations and Conclusion

A limitation of the present review is that non-English and unpublished articles were not included, which may have added a different nuance to the present findings, however, the fact that we included studies conducted in several countries should have reduced cultural biases. Also, the fact that we included qualitative studies, whose publishability does not depend on statistical significance, should have reduced the 'file-drawer' effect, where null-effect studies are not represented in the literature.

In conclusion, this review has identified key barriers to male help-seeking that can be targeted by health psychologists through purposeful interventions to increase appropriate help-seeking by men. The most prominent barriers based on the reviewed literature are psychological in nature, and hence would seem amenable to psychological interventions.

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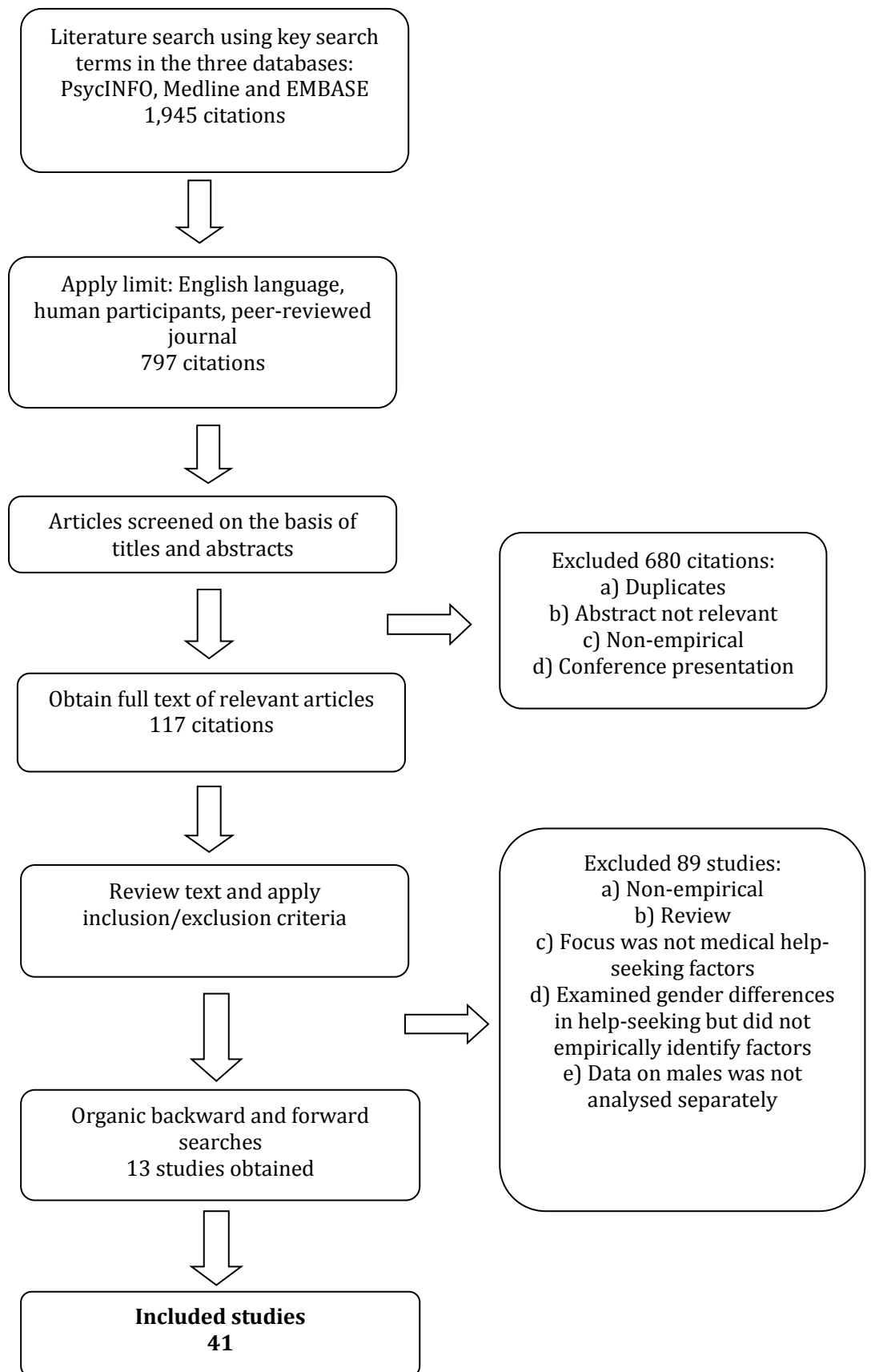


Figure 1. The search process.

<u>Study</u>	<u>Methodology and sample characteristics</u> (<i>'n'</i> = male participants)	<u>Psychological factors identified</u>	<u>Contextual factors identified</u>	<u>Help-seeking context</u>	<u>Quality rating</u>
Ansong et al. (1998) U.S.A	Questionnaires n= 649, Mean age= 64.5; SD= 7.2	Embarrassment, lack of knowledge of treatment availability, the belief that treatment was risky/harmful	Inability to afford the cost of treatment	Impotence	Medium (1.5)
Blazina & Watkins (1996) U.S.A	Questionnaires n= 148, Mean age= 23.3; SD= 3.2	Gender role conflict, restricted emotionality		Psychological health	Medium (1.7)
Briscoe (1987) U.K.	Questionnaires n= 114, Age range:16-45	Negative attitudes towards psychological help-seeking, lack of general positive affect	Lack of parenthood	General health	Medium (1.7)
Buor (2004) Ghana	Questionnaires n= 260, Age: 202 men between 0-59, and 58 men above 60		Service costs, low level of education, low quality of service, distance to services	General health	High (1.9)
Chan & Hayashi (2010) Japan	Questionnaires n= 265, Age: 151 men below 30, and 114 men above 30	Restrictive emotionality, conservative attitudes towards success, power and competition	Young age	General health	High (1.8)
Coles et al. (2010) U.K.	Focus groups n= 82, Age range: 40s to 80s	Need for independence and control, fear and embarrassment	Lack of regular services, restricted opening hours, lack of availability of health care service information	General health	Low (1.3)
Cusack et al. (2006) Australia	Questionnaires n= 73, Mean age= 37.5; SD= 11.0	Negative perceptions of treatment helpfulness	Lack of bond with existing therapist	Psychological health	High (1.8)
Davies et al. (2000) U.S.A	Focus groups n= 49	Lack of knowledge about services, not feeling susceptible to health issues, low perceived credibility of healthcare provider, fear and uncertainty about acceptance of gay/bisexual men	Lack of time, cost of service	General and psychological health	Medium (1.5)
Doherty & Kartalova-O'Doherty (2010) Ireland	Questionnaires n = 155	Embarrassment, no perceived limitations in physical activities as a result of symptoms	Not cohabiting, full-time employment, living in an urban area, low educational status, cost of service	Psychological health	High (1.8)

Dupéré, O'Neill, & Koninck (2012) Canada	Participant observation, semi-directed interviews, and focus groups n= 22, Median age= 47	Difficulty in recognising the seriousness of the problem, feeling incapable of seeking help, pride and masculine norm conformity, ignorance about resources, negative past experiences	Financial, organisational or geographic obstacles	General health	High (1.8)
Gascoigne, Mason, & Roberts (1999) U.K.	Semi-structured interviews n= 6, Mean age= 39 (range: 20-59)	Fear about cancer, embarrassment about looking foolish if nothing was wrong, reluctance to have the genitals examined and handled		Testicular cancer	Medium (1.6)
George & Fleming (2004)	Semi-structured interviews n= 12, Age range: 50-59	Lack of interest in one's body/health, need for power and control when accessing health services	GPs rushing patients	Prostate cancer	Low (1.4)
Good, Dell, & Mintz (1989) U.S.A.	Questionnaires n= 401, Mean age= 19.3	Traditional attitudes about the male role, concern about expressing affection/emotions, especially toward other men		Psychological health	High (1.8)
Hale, Grogan, & Willott (2007) U.K.	Semi-structured interviews n= 20, Age range= 51-75	Adherence to masculinity norms, the perception of illness as weakness, fear that a disease would be found		Prostate disease	Medium (1.7)
Holden et al. (2006) Australia	Questionnaires, n= 5990, Age range= above 40		Young age, never-married status, living in regional or remote areas, lack of fluency in English	Reproductive health disorders	Medium (1.5)
Jeffries & Grogan (2012) U.K.	Interviews n= 7 Age range= 22-33	Masculine norms, feelings of weakness and vulnerability, embarrassment		General health	Medium (1.6)
Johnson et al. (2012) Canada	Semi-structured interviews n=38, Age range: 24-50	Self-reliance, guarded vulnerability, need for acute care rather than routine care	Lack of collaborative partnership with caregiver	Psychological health	Low (1.3)
Kalmuss & Austrian (2010) U.S.A.	Focus groups n= 74, Age range: 49 men between 18-23, and 25 men between 24-30	Hegemonic masculinity, lack of STD symptoms	Financial barriers	Sexual health care	High (1.8)

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Koopmans & Lamers (2007) Netherlands	Questionnaires n= 3,747, Age range: 15-75	Lack of symptoms that cause physical restrictions	Young age	General health	High (1.9)
Lane & Addis (2005) U.S.A.	Questionnaires n= 105, Mean age: 20.2; SD= 1.7	Male gender role conflict, conservative attitudes toward success, power, and competition, restrictive emotionality		Depression and substance abuse	High (1.8)
Lindberg, Lewis-Spruill, & Crownover (2006) U.S.A.	Focus groups n= 18, Mean age= 16.5 (range= 15-18)	Fear of being seen/discovered, stigma related to infection, damage to reputation, embarrassment/shame,	Lack of privacy of services, waiting times, lack of respect by service providers, difficulty accessing and navigating the system	Sexual health	Medium (1.5)
Mackenzie, Gekoski, & Knox (2006), Canada	Questionnaires n= 105, Mean age= 46.1; SD= 17.7 (range= 18-89)	Negative attitudes towards psychological openness	Young age	Psychological health	High (1.8)
Mansfield, Addis, & Courtenay (2005) U.S.A.	Scale development n= 537, Mean age= 19.9 ; SD=1.16	Need for control and self-reliance, minimising problem and resignation, distrust of caregivers, need for privacy/emotional control		General health	High (1.9)
Moser et al. (2005)	Questionnaires n= 98, Mean age= 57; SD= 13	Lack of knowledge about heart attacks and thrombolytic therapy, misattribution of the source of the symptoms, lack of anxiety or seriousness with which the symptoms were viewed		Acute myocardial infarction	High (1.8)
Noone & Stephens (2008)	Interviews n= 7, Median age= 59	Hegemonic masculinity views, stoicism		General health	Low (1.4)
O'Brien, Hunt, & Hart (2005) Scotland	Focus groups n= 55, Age range: 15-72	Perception of many symptoms as minor, tendency for non-disclosure of emotions, need for self-sufficiency		General and psychological health	Low (1.3)
Ojeda & Bergstresser (2008) U.S.A.	Questionnaires n= 771, Age range: 18+	Stigma avoidance, negative attitudes toward treatment, mistrust or fear of the service system		Psychological health	Medium (1.6)

O'Loughlin et al. (2011) U.S.A.	Questionnaires n= 339, Mean age= 56.3; SD= 15.2	Adherence to the toughness norm, 'wait and see' attitudes that delay seeking help		Depression	Low (1.2)
Pearson & Makadzange (2008) Zimbabwe	Semi-structured interviews and focus groups n= 127, Age range= 16-60	Attitudes of resilience and self-reliance, shyness, embarrassment		Sexual health	Medium (1.6)
Pederson & Vogel (2007) U.S.A.	Questionnaires n= 575, Age range: 18-40	Gender role conflict, self-stigma associated with seeking counselling, reluctance to disclose distressing information, negative attitudes toward counselling		Psychological health	High (1.9)
Rahman, Al-Sadat, & Low (2011) Malaysia	Questionnaires n= 1331, Mean age= 54.7; SD= 8.3, Age range: 40-79	Belief that symptoms were a normal part of ageing, embarrassment, belief that symptoms are temporary, uncomfortable talking about them	Unable to afford treatment	Erectile dysfunction	Low (1.2)
Rochlen et al. (2010) U.S.A.	Focus groups n= 45, Mean age= 48; range= 24-64	Male role norms, misattributing depression, attitudes of not exposing weakness, perceptions of incompetence among health-care providers		Depression	High (1.8)
J. A. Smith et al. (2007) Australia	Semi-structured interviews n= 36, Age range= 35-80	Independence, hegemonic masculinity		General health	Low (1.4)
J. A. Smith et al. (2008a) Australia	Semi-structured interviews n=36, Age range: 35-80	Negative past illness experience, perception of one's ability to carry out regular activities, low perceived illness severity	Time unavailable to monitor health	General health	Low (1.4)
J. A Smith et al. (2008b) Australia	Semi-structured interviews n=36, Age range: 35-80		Service provider jargon, incompetence of service provider, serious/humourless communication of service provider, lack of empathy of service provider, long and complicated treatment options	General health	Low (1.4)

J. P. Smith, Tran, & Thompson (2008) U.S.A	Questionnaires n= 307, Median age= 20	Traditional masculine ideology, negative attitudes towards psychological help-seeking, weak help-seeking intentions		Psychological health	High (1.8)
Steinfeldt et al. (2009) U.S.A.	Questionnaires n= 211, Mean age= 19.5; SD= 1.1	Gender role conflict, stigma toward seeking psychological help		Psychological health	High (1.8)
Steinfeldt & Steinfeldt (2010) U.S.A.	Questionnaires n= 179, Mean age= 15.7; SD= 1.3	Gender role conflict, negative attitudes toward seeking psychological help, restrictive emotionality		Psychological health	High (1.8)
Timlin-Scalera et al. (2003) U.S.A.	Semi-structured interviews n= 22, Age range= 14-18	Lack of awareness of services, perceptions of help-seekers as weak and very troubled		Psychological health	High (1.8)
Vogel et al. (2011) U.S.A.	Questionnaires n= 4,773; Mean age= 32.9; SD = 12.2	Masculine gender role norms, negative attitudes towards help-seeking, self-stigma		Psychological health	High (1.8)
Witty et al. (2011) U.K.	Semi-structured interviews n= 34, Mean age= 51, range= 16-72	Anxiety related to using certain services (e.g., NHS direct phone-line)	Information presented by health professionals and health information resources too complicated	General health	Low (1.4)

Table 1. Main study characteristics of included papers.

<i>PSYCHOLOGICAL FACTORS</i>	
<i><u>COGNITIVE (knowledge, attitudes and beliefs)</u></i>	<i><u>EMOTIONAL</u></i>
Internalisation of masculine norms	Embarrassment about help-seeking
Negative attitudes toward emotional expression	Anxiety about using medical services
Need for independence/control	Fear about discovering a disease
Viewing symptoms as minor and insignificant	Distress due to feelings of weakness and vulnerability
Not seeing oneself as susceptible to disease	
Lack of knowledge about symptoms	
Lack of knowledge about services	
Negative attitudes toward help-seeking	
<i>CONTEXTUAL FACTORS</i>	
<i><u>HEALTH-SERVICE RELATED</u></i>	<i><u>SOCIO-DEMOGRAPHIC</u></i>
Cost of service	Educational status
Lack of regular services for men	Marital status
Restricted opening hours of GPs	Young age
Unavailability of health service information	Full-time employment/lack of time
Poor communication with health professionals	
Distrust/lack of credibility of health professionals	

Table 2. Identified factors associated with delays in help-seeking.

Figure captions.

Figure 1. The search process.

Table 1. Main study characteristics of included papers.

Table 2. Identified factors associated with delays in help-seeking.